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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/673,313 | 11/24/2000 | Thomas Geisler | 1350 | 3820 |
| 7590 | 11/19/2003 | | EXAMINER | |
| Striker Striker & Stenby 103 East Neck Road Huntington, NY 11743 | | | AMINI; JAVID A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2672 | |

DATE MAILED: 11/19/2003

Restart

Please find below and/or attached an Office communication concerning this application or proceeding.



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| 09/673,313 | 11/24/2000 | Thomas Geisler | 1350 | 3820 |
| 7590 | 10/03/2003 | | EXAMINER | |
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| | | | DATE MAILED: 10/03/2003 | 10 |

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/673,313 | GEISLER, THOMAS | |
| | Examiner | Art Unit | |
| | Javid A Amini | 2672 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-13 is/are rejected.
 7) Claim(s) 1-13 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed June 19, 2003 have been fully considered but they are not persuasive.

- Response to remarks, page 6, lines 11-16: Examiner's rejection, page 7 of the office action dated April 17, 2003: Applicant should be able to show the complete calculation for the claim language in claim 1 ("calculation of" or "calculating").

Applicant argues that the calculation of a plurality of bit maps... is clearly defined. The three steps, "calculation of", "storage of", and "execution of" have been changed to "calculating", "storing", and "executing". Examiner's reply:

Applicant fails to provide the requested information (Applicant should be able to show the complete calculation for the claim language in claim 1) on page 7, lines 4-5 of office action dated April 17, 2003. Therefore the rejection is still maintained.

- Response to remarks, page 7, lines 8-12: Applicant argues that the reference Van de Lavoir et al. do not teach the process flow line in path curve. Examiner's reply:

In contrast the reference in Figs. 13 illustrates clearly the path curve processes.

- Response to remarks, page 7, lines 12-17: Applicant argues that in Van de Lavoir the display icons of the process flow are fixed in their positions of the process.

And the counter in Fig. 13, it is not possible for one process icon to move to another position in the process line during displaying a production process.

Examiner's reply: Van de Lavoir in Figs. 13 illustrate clearly the applicant's argument and the claim language.

- Response to remarks, page 7, lines 18-22: Applicant arguments are not clear.

Examiner's reply: Figs. 12 and 13 illustrate an object representation is moving along the process flow. Van de Lavoir in (col. 21, lines 46-47) teach the flow of logic through the delay timer is affected by the color of the circle.

- Response to remarks, page 8, lines 3-10: Applicant argues that in the Van de Lavoir patent, different icons represent different steps in the process flow. In the present invention, the object-here, the pointer is moving and all of the object representations are object representations of this one object. Examiner's reply:

Van de Lavoir represents different steps exactly similar to the applicant invention with one object.

- Response to remarks, page 8, lines 15-23: Applicant argues that the Van de Lavoir provide no suggestion that such a calculation between two stored graphics is performed. Examiner's reply: Van de Lavoir in (col. 37, lines 23-38) teaches the concept of claim language.

- Response to remarks, page 9, lines 1-4: Applicant argues that the Van de Lavoir do not suggest of a simplified interpolation. Examiner's reply: In contrast Van de Lavoir teach again in (col. 37, lines 23-38).

- Response to remarks, page 9, lines 5-9: (Examiner's correction: The term "inherent" in claims 9 and 11 miss-typed, it should be an "obvious") Applicant argues the claims 9 and 11 are not obvious over the reference. Examiner's reply:

the different locations of the method are not significant to the concept of the invention. Applicant should be able to show the significant of this invention between "located on board a motor vehicle" and "a stationary engine with rotating wheels above the ground".

- Response to remarks, page 9, lines 10-14: Applicant argues that the references Van de Lavoir and Iwamoto do not suggest a pixel interpolation in any way. Examiner's reply: Iwamoto in Figs. 2, 3 and Fig. 5 box 324, illustrates the detected data vs. sensor output signal and graph display frame memory. And also Van de Lavoir in Figs. 16 and 17 suggest calculating display configuration.
- Response to remarks, page 9, lines 15-20: Applicant argues that the reference Iwamoto provides no teaching or suggestion that the object of a graphical representation is a speedometer pointer. Examiner's reply: Iwamoto et al. in Fig. 14 illustrate low and high speed indicator (speedometer) in form of analog graph. And also in the Van de Lavoir's invention suggest a circular indicator in Fig. 13. The combination of modifying the Iwamoto et al. meaning: inputting the signals from Fig. 14 into Fig. 16 b box 330 of Van de Lavoir et al. will provide similar output as applicant's invention.
- The previous rejection of office action dated April 17, 2003 is still maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 9, 11 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over

Van de Lavoir et al.

1. Claim 1.

“A method for representing objects in bitmapped format on a matrix like display device, having the following steps: calculating a plurality of bit maps for a certain number of various object representations along a predetermined path curve in advance; storing the plurality of bit maps in memory in advance; and executing a representation processing with a display sequence of object representations along the path curve by reading and displaying correspondingly memorized bit maps, where the object moves along the path curve during the representation processing and displaying of the correspondingly memorized bit maps.” Van de Lavoir discloses in Fig. 23 step 372 that, the parse tree is again traversed to assign position coordinates and icon rendering data (e.g., bitmaps) to each node. Van de Lavoir illustrates in Fig. 7b example of the representation of a process control statement using dynamic graphical icons. In this case is representing the delay time along a predetermined path curve in advance, also see Figs. 13a and b (col. 21, lines 30-45). Van de Lavoir discloses in (col. 8, lines 15-20) the process control computer will typically include data storage capability, often in the form of random access memory. This memory may be used to store the digital and analog input and output values by suitably encoding the values into a form capable of being stored as binary digits in the computer memory.

Van de Lavoir illustrates in Fig. 16b, the live data module is responsible for collection, storage and conversion (formatting) of the real time values of all process control computer variables that

are present in the currently displayed program statement. Van de Lavoir discloses in (col. 35, lines 5-14) as indicated at step 372 Fig. 23, the parse tree is again traversed to assign position coordinates and icon rendering data (e.g., bitmaps) to each node (col. 35, lines 31). But Van de Lavoir does not explicitly specify the calculation of bit maps for a certain number of various objects. It would have been obvious to one of ordinary skill in the art at the time the invention was made to visual appearance of a data logical flow or logic flow, in order to allow the visual quality or color of the symbols and the interconnecting network to change in accordance with live data received from the plant or process being controlled.

1. Claim 2.

"The method of claim 1, characterized in that in the calculating of the plurality of bit maps in advance, a filtration is performed for the sake of edge smoothing in the local region", The step is obvious because the filtration and calculation illustrated by Van de Lavoir in Fig. 20.

2. Claim 3.

"The method of claim 1, characterized in that an associated precalculated and pre-stored background image has the various object representations superimposed on it", the step is obvious Van de Lavoir illustrates in Fig. 7a.

3. Claim 4.

"The method of claim 1, characterized in that the spatial difference between adjacent object representations along the path curve, which are precalculated and pre-stored as a respective bit map, is substantially smaller than the applicable object representations", the step is obvious Van de Lavoir illustrates in Fig. 7a.

4. Claim 5.

“The method of claim1, characterized in that for displaying object representations, which are located between two object representations having a respective precalculated and pre-stored bit map, a paired interpolation between the corresponding pixel values is performed”, the step is obvious because Van de Lavoir discloses in (col. 37, lines 23-26) Although the dynamic control of visual quality or color of the icons themselves is comparatively straightforward, evaluating the visual quality or color of the incoming (left) and outgoing (right)

5. Claim 6.

“The method of claim 5, characterized in that the pixel values are present separately in accordance with certain colors, preferably the three fundamental colors of red, green and blue, and the interpolation is performed separately for each color”, Van de Lavoir discloses in (col. 2, lines 32-44) In one form of the present invention, the variable graphic characteristic or visual quality of the graphical symbols includes the use of colors which may be recognized by people who otherwise have difficulty perceiving certain colors. Thus, for example, the color blue (any color) is used to indicate a TRUE condition, whereas the color orange is used to indicate a FALSE condition. By employing a consistent set of graphical symbols and applying a consistent set of rules for arranging these graphical symbols, the status of any process may be quickly conveyed to any qualified user, regardless of computer hardware platform employed and regardless of the native language of the user.

6. Claim 8.

“The method of claim 1, characterized in that a compression of the pre-stored bit map data is performed”, the step is obvious because Van de Lavoir discloses in (col. 31, lines 54-57) the

hidden pipe algorithm is called when the entire uncompressed graphical representation of a program statement will not fit in the display area of the window. It means data are compressed.

7. Claim 9

The method of claim 1, characterized in that the method is employed on a dashboard display device, located on board a motor vehicle, for representing a pointer. The step is obvious because the different locations of the method are not significant to the concept of the invention.

8. Claim 11, "The method of claim 9 or 10, wherein an associated pre-calculated and pre-stored background image is a corresponding speed scale". The step is obvious because the speed scale is resulted from pre-stored or calculated data information.

9. Claim 12, "wherein the various object representations are object representations of the same object". Van de Lavoir in Figs. 13 represents different steps similar to the applicant invention with one object.

Claims 7, 10, 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Van de Lavoir et al. in view of Iwamoto et al.

10. Claim 7.

The method of claim 6, characterized in that for the interpolation, the mean value for each pixel, weighted in accordance with the intermediate position, is calculated. Van de Lavoir does not explicitly specify the mean value for each pixel, however the step is obvious because Iwamoto teaches in (col. 9, lines 1-5) an average value is determined by the average value processing portion, and a fluctuation ratio is determined by fluctuation processing portion. And also one of the functions of the display controller is to calculate the mean value and weighted values of the pixels. Thus, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to incorporate the teaching of Iwamoto into Van de Lavoir in order to displays data in a machine having a plurality of sensors which detect such data value as speed, pressure and temperature. A converter is then used to process output signals from these sensors. The apparatus further includes an input-calibration device for correcting the output signals from the converter and for issuing detected data, a cycle data processing mechanism for displaying data items such as injection speed and injection pressure every cycle based on the detected data, and control data processing mechanism for displaying shot-time items and fluctuations through repeated injection cycles to monitor operation based on the detected data from the input-calibration means.

11. Claim 10, "The method of claim 9, wherein the pointer is a speedometer pointer, and wherein a pointer bitmap corresponding to a speed is read and displayed at a given time". Van de Lavoir does not explicitly specify the speedometer, however Iwamoto et al. teaches in (col. 4, lines 50-61) that, each channel representation is divided into two rows, wherein an upper row is used for displaying calibration-data type such as "INPUT VOLTAGE" and a lower row is used for displaying position name for sensors, such as "SPEEDOMETER ". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Iwamoto into Van de Lavoir in order to appreciated that computer technology has developed and continues to develop at a rapid pace. The combination of modifying the Iwamoto et al. meaning: inputting the signals from Fig. 14 into Fig. 16 b box 330 of Van de Lavoir et al. will provide similar output as applicant's invention.

12. Claim 13, "wherein the object is a pointer and wherein the pointer moves along a scale, wherein in different position of the pointer, graphical representations are calculated and stored in

advanced". Van de Lavoir does not explicitly specify the speedometer, however Iwamoto et al. teaches in (col. 4, lines 50-61) that, each channel representation is divided into two rows, wherein an upper row is used for displaying calibration-data type such as "INPUT VOLTAGE" and a lower row is used for displaying position name for sensors, such as "SPEEDOMETER ". Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Iwamoto into Van de Lavoir in order to appreciated that computer technology has developed and continues to develop at a rapid pace. The combination of modifying the Iwamoto et al. meaning: inputting the signals from Fig. 14 into Fig. 16 b box 330 of Van de Lavoir et al. will provide similar output as applicant's invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1 and 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
14. Claims 1 and 2 recite the limitation " calculation of a plurality of bit maps ". There is insufficient antecedent basis for this limitation in the claim. Applicant should be able to show the complete calculation for the above limitation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

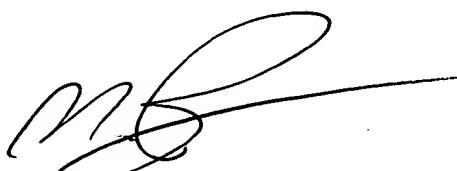
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
Art Unit 2672

Javid Amini
August 26, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600